U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
STT Subbase Oil Spill - E18204 - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II

Subject: **POLREP #16**
STT Subbase Oil Spill - E18204
Z2CA
St Thomas, VI
Latitude: 18.3324693 Longitude: -64.9602165

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From: Kimberly Staiger, OSC
Date: 3/27/2018
Reporting Period: March 27, 2018

1. Introduction

1.1 Background

Site Number:	Z2CA	**Contract Number:**	EP-S2-15-02
D.O. Number:	75	**Action Memo Date:**	
Response Authority:	OPA	**Response Type:**	Emergency
Response Lead:	STATE	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	3/12/2018	**Start Date:**	3/12/2018
Demob Date:		**Completion Date:**	
CERCLIS ID:		**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:	E18204	**Reimbursable Account #:**	

1.1.1 Incident Category

Emergency Response to mitigate a discharge of oil into Krum Bay.

1.1.2 Site Description

The Site consists of a chronic discharge of oil from an unknown source entering into a storm water sewer. The storm water outfall is discharging the accumulated oil into Krum Bay.

This project is being conducted under the authority of the Clean Water Act and the Oil Pollution Act of 1990 (OPA90).

1.1.2.1 Location

The site is located along Subbase Road in St Thomas, US Virgin Islands. The stormwater outlet lies in Krum Bay near the public boat ramp off Subbase Road and discharges directly to Krum Bay.

1.1.2.2 Description of Threat

Oily product is entering Krum Bay and navigable waterways from an unknown source.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On Saturday, March 3, 2018 at approximately 4 pm, vapors within a concrete vault located near the Puma facility in the Subbase area of St. Thomas ignited resulting in a flashover. The vault where the flashover occurred sits adjacent to the Puma facility fenceline along Subbase Road. VIFD, VIPD, VITEMA, DPNR, and WAPA responded and found three concrete utility vaults containing petroleum product and water. Two vaults house electrical transmission lines owned by WAPA and an abandoned vault owned by Viya. The two WAPA vaults and Viya vault were completely filled with a petroleum/water mix. DPNR contacted a local contractor to remove the oil/water mixture from the vaults. Approximately 3,900 gallons of fuel and water mixture was pumped from the vaults on Saturday. DPNR issued a verbal order to the Puma facility to close all valves and cease operations until further notice.

On March 4, 2018, the USCG began investigating a sheen on Krum Bay after receiving an NRC report. There is a continuous discharge of an unknown petroleum product from an unknown source into Krum Bay, a navigable waterway of the United States. The discharge is from a 12" storm drain pipe, as well as groundwater seepage of petroleum product into Krum Bay. Based upon the proximity of the three utility vaults, the consistency of the petroleum product observed within the vaults and Krum Bay, and the seepages of oil observed from the groundwater into Krum Bay, the incidents appear to be related.

On Monday, March 5, 2018, EPA, DPNR, VITEMA, WAPA, VIPD, USCG and Puma were all on site investigating the source of the leak into Krum Bay and the utility vaults. DPNR and the USCG collected samples from all the tanks on the Puma facility, the iso tank stored on the Puma facility that contains materials pumped from the three utility vaults, WAPA's diesel fuel tank, Patrick Charles trucking facility (used oil tank and stained soil), and the outfall in Krum Bay for fingerprint analysis. The samples were sent to the Marine Safety Lab in Connecticut for fingerprint oil analysis to determine a match with oil source in Krum Bay, and to confirm that the discharge into Krum Bay is related to the discharge into the utility vaults.

DPNR and EPA conducted a site walk of the Puma facility located on Subbase Road focusing on any spills or incidents that have occurred at the facility that could potentially be contributing to the petroleum discharges observed within Krum Bay and the utility vaults. According to Puma representatives at the time of the site walk, no discharges that could potentially threaten to impact a navigable waterway occurred within the last five years. In addition the representative stated that there is no history of line tightness test failures since 1997. The most recent line tightness test was conducted after Hurricane Maria on October 2, 2017.

The Patrick Charles trucking facility located along Subbase Road downgradient of the Puma facility is staging trucks alongside the roadway on an unpaved area. There is significant oil staining beneath the trucks leading to a nearby storm drain. A walk through of the Patrick Charles facility conducted on March 5th with DPNR revealed poor housekeeping and oil soaked soils at the facility. On March 6th at approximately 1440 hours, USCG and EPA observed a spill of approximately one cup of oil from one of the parked trucks onto the road surface and entering the adjacent storm sewer.

Puma contracted with a local company to remove product from the Viya vault on March 6th to prevent a future flashover. Approximately 2,600 gallons of petroleum/water mixture was removed from the vault and is currently being stored in an iso tank on Puma property. Puma has placed and is currently maintaining hard curtain boom near the outfall in Krum Bay as well as sorbent boom to capture any product on the surface of the water. In a meeting held with Puma representatives, USCG and EPA, Puma reported that on February 16, 2018, facility personnel discovered a loss of 2,354 gross gallons from Tank 32157 (Tank 57). The loss consisted of 1,494 gallons of water and 860 gallons of gasoline. According to documentation provided by Puma, the water inside Tank 57 came from a receiving pipeline during the transfer of product from the pier in Crown Bay to the terminal on February 10, 2018 as part of their normal operating procedure.

DPNR requested EPA assistance to review Puma's SPCC plan and to conduct air monitoring to determine if the vapors within the vaults was creating an unsafe work environment for responders and neighboring businesses. Air monitors were staged in front of the Department of Public Works yard, at the intersection closest to the two vaults beneath the public roadway, and one at the barricades set up to block traffic from entering the area. LEL readings were at 0% on all monitors, and occasional spikes of VOCs up to 560 ppb were observed on the monitor closest to the manholes.

Puma continues to conduct air monitoring in the area of the three concrete vaults located near the Puma facility in Subbase in accordance with an air monitoring plan which was submitted to DPNR. LEL readings have consistently been 0% on all monitors.

On March 9, 2018, an oily liquid was observed leaking from the sanitary sewer manhole near the WAPA vault. According to an employee in the DPW yard, the pump house for the sanitary sewer was shut down on March 3rd after the flashover occurred within the WAPA utility vault which was causing the sanitary sewer to overflow. Sorbent pads were placed over the oily discharge to prevent it from entering the nearby storm drain. Once the pump house was operating, the discharge ceased.

As part of the spill investigation, DPNR placed dye into a storm drain located near the loading rack on the Puma facility. Dye testing confirmed that the storm drain on the property discharges to Krum Bay from the storm water outfall where an active oil discharge is occurring.

On March 9, 2018, EPA opened the Oil Spill Liability Trust Fund (OSLTF) due to concerns that the source of the discharge into Krum Bay is from an inland source within EPA’s response jurisdiction.

EPA is the lead FOSC for the response. EPA will continue to coordinate activities with DPNR.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

This action is being taken to mitigate the release of oil into navigable waters of the United States and is consistent with the Code of Federal Regulations for the USCG:

33 CFR section 154.1020 defines substantial threat of a discharge to mean “any incident or condition involving a facility that may create a risk of discharge of oil. Such incidents include, but are not limited to storage tank or piping failures, above ground or underground leaks, fires, explosions, flooding, spills contained within the facility, or other similar occurrence,

and the EPA:

40 CFR Subpart D section 300.317 National response priorities(b) Stabilizing the situation to preclude the event from worsening is the next priority. Comparable measures should be taken to stabilize a situation involving a facility, pipeline, or other source of pollution. Stabilizing the situation includes securing the source of the spill and/or removing the remaining oil from the container (vessel, tank, or pipeline) to prevent additional oil spillage, to reduce the need for follow-up response action, and to minimize adverse impact to the environment.

2.1.2 Response Actions to Date:

Today at 1100 hours, St. Thomas experienced a very heavy rainfall that lasted for approximately one hour. The rainfall caused a deluge of water to enter the storm sewer system and discharge into Krum Bay. In addition to the stormwater outfall, overland sheet flow of storm water was significant and contained sheening that was entering Krum Bay via the public boat ramp. Sheen could be observed on the driveway of the Patrick Charles Trucking facility and in the gut across the street from the trucking facility. Oil stained soils adjacent the road surface appeared to be contributing to the sheen.

DPNR was on site following the heavy rainfall to observe the sheening on the street entering the bay and storm drains in addition to observing the force of the stormwater discharging from the outfall. The stormwater discharge from the outfall was so forceful that it submerged the sorbent boom placed around the outfall and was pushing against the hard curtain boom. While sheen could be observed on the surface of the water, the seepages from groundwater could not be observed due to the turbidity of the water. The entire bay was so turbid that it appeared to be a brownish color.

After observing the discharges to the bay, EPA personnel on site observed the three utility vaults to determine if product and water was entering the vaults. A heavy gasoline odor could be detected several yards from the WAPA utility vault that had experienced two flashovers on March 3rd. EPA observed what appeared to be gasoline product within the vault. Approximately 3' of liquid was present within the vault, but it was unclear if all of the liquid was gasoline or if there was a gasoline/water mix. Air monitoring conducted at 1246 hours at the mouth of the manhole determined that the LEL was 7%. Monitoring conducted at 1248 hours within the vault determined that the LEL was 10%.

EPA immediately began notifying partner agencies about the explosive vapors that were present within the vault that house live transmission lines, and also began securing the scene to ensure that an ignition source was not present that could ignite the vapors. VIPD, VIFD, VITEMA, DPNR, WAPA, DPW, and USCG were all notified by phone. EPA recommended that the road be closed to through traffic and evacuation of the area immediately surrounding the utility vault.

VITEMA, WAPA, VIPD, VIPA PD, and VIFD all responded to the site to secure the area. The road was shut down and several vehicles parked in the area near the vault were pushed from the immediate area to ensure that an ignition source would not be present if the engines were started.

EPA discussed collecting a sample of the petroleum product that is currently present within the vault with WAPA to determine the responsible party. However, since there are live transmission lines and an LEL environment, EPA will not be able to safely collect the sample unless the power is shut down to the lines within the vault. The transmission lines service all of St. Thomas and St. John, and shutting off service to the transmission lines is a process that takes 6 hours to complete and will need to be elevated to the Governor's Office in order to obtain permission to start the process.

2.2 Planning Section

2.2.1 Anticipated Activities

EPA has a planned a Unified Command meeting with USCG, DPNR and NPFC to discuss current conditions in Krum Bay, the oil spill investigation activities, and plans to abate the discharge. The meeting scheduled for March 26, 2018 was postponed due to the evolving conditions at the Site.

EPA will be presenting plans to address and halt the discharge of oil into Krum Bay at the meeting and will also discuss future actions to address the vapors within the vaults.

2.2.1.1 Planned Response Activities

EPA will continue to work with federal and territorial partners to investigate and abate the source of the continuous discharge.

2.2.1.2 Next Steps

EPA expects to receive the fingerprint analytical results from the USCG this week, and will discuss planned actions to address the active discharge with territorial partners in order to develop an abatement plan to halt the discharge of oil into Krum Bay.

If permission is provided to shut down the power to the transmission lines, EPA intends to collect a sample and send it for fingerprint analysis in addition to contracting with a local vendor to pump out the materials present within the vault. EPA is currently reviewing rainfall totals for the month of March to determine if the flashover that occurred on March 3rd was precipitated by a heavy rain event.

EPA is coordinating with VIWMA to conduct a dye test at the pumping station located adjacent the DPW yard to determine if the pump station is connected to the storm water outfall in Krum Bay. The dye test was originally scheduled for today; however, due to the heavy rain event, it has been postponed.

Future pollution reports will be generated weekly, unless conditions change and warrant a shorter reporting period.

2.3 Logistics Section

Not applicable

2.4 Finance Section

2.4.1 Narrative

March 9, 2018 initial $50,000 was received from NPFC
March 25, 2018, the ceiling was increased to $80,000.
March 26, 2018, verbal confirmation of $100,000 ceiling increase received from NPFC.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	$70,000.00	$23,226.00	$46,774.00	66.82%
Intramural Costs				
USEPA - Direct	$85,387.00	$29,582.00	$55,805.00	65.36%
USEPA - InDirect	$24,613.00	$0.00	$24,613.00	100.00%
Total Site Costs	$180,000.00	$52,808.00	$127,192.00	70.66%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

USEPA, Region 2
DPNR
USCG
VIPD
VIFD
VITEMA
DPW

4. Personnel On Site

ERRS -1
EPA - 2

5. Definition of Terms

DPNR - Department of Planning and Natural Resources
VIFD - Virgin Islands Fire Department
VITEMA - Virgin Islands Territorial Emergency Management Agency
DPW - Department of Public Works
WAPA - Water and Power Authority
VIPD - Virgin Islands Police Department
VIWMA - Virgin Islands Waste Management Authority
NRC - National Response Center
EPA - U.S. Environmental Protection Agency
USCG - U.S. Coast Guard
ERRS - Emergency and Rapid Response Services (EPA Contractor)
SPCC - Spill Prevention, Control and Countermeasure
OSLTF - Oil Spill Liability Trust Fund
LEL - Lower Explosive Limit
VOC - Volatile Organic Compound
NPFC - National Pollution Funds Center

6. Additional sources of information

6.1 Internet location of additional information/report

Additional pollution reports, site photographs and information can be found at:
https://response.epa.gov/subbaseoilspill

7. Situational Reference Materials

Pictures of conditions in Krum Bay can be found on the above website.